

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005003369	A1	20050106	US 2003-684205	20031010
US 2005123987	A1	20050609	US 2005-40759	20050121
PRIORITY APPLN. INFO.:			US 2002-417803P	P 20021010
			US 2002-417817P	P 20021011
			US 2003-684205	A1 20031010

IT 9050-76-4, **RNase H**
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(method for **depleting** specific nucleic acids from mixture isolated from blood)

L25 ANSWER 8 OF 236 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2005:1243337 CAPLUS
TITLE: Specific recognition and cleavage of the plus-strand primer by reverse transcriptase
AUTHOR(S): Atwood-Moore, Angela; Ejebe, Kenichi; Levin, Henry L.
CORPORATE SOURCE: Section on Eukaryotic Transposable Elements, Laboratory of Gene Regulation and Development, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD, 20892, USA
SOURCE: Journal of Virology (2005), 79(23), 14863-14875
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 35

THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Reverse transcriptases (RTs) of retroviruses and long terminal repeat (LTR)-retrotransposons possess DNA polymerase and RNase H activities. During reverse transcription these activities are necessary for the programmed sequence of events that include template switching and primer processing. Integrase then inserts the completed cDNA into the genome of the host cell. The RT of the LTR-retrotransposon Tf1 was subjected to random mutagenesis, and the resulting transposons were screened with genetic assays to test which mutations reduced reverse transcription and which inhibited integration. We identified a cluster of mutations in the RNase H domain of RT that were surprising because they blocked integration without reducing cDNA levels. The results of immunoblots demonstrated that these mutations did not reduce levels of RT or integrase. DNA blots showed that the mutations did not lower the amts. of full-length cDNA. The sequences of the 3' ends of the cDNA revealed that mutations within the cluster in **RNase H** specifically reduced the removal of the polypurine tract (PPT) primer from the ends of the cDNA. These results indicate that primer removal is not a necessary component of reverse transcription. The residues mutated in Tf1 RNase H are conserved in human immunodeficiency virus type 1 and make direct contact with DNA opposite the PPT. Thus, our results identify a conserved element in RT that contacts the PPT and is specifically required for PPT removal.

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FILE 'HOME' ENTERED AT 16:26:56 ON 09 JAN 2006

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FILE 'CAPLUS, MEDLINE, BIOSIS' ENTERED AT 16:27:10 ON 09 JAN 2006

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L1      34 SEA ABB=ON  PLU=ON  BAIT (2A) (MOLECULE OR PROBE OR PRIMER)
L2      0 SEA ABB=ON  PLU=ON  L1 AND GLOBIN
L3     118 SEA ABB=ON  PLU=ON  BAIT (10A) (MOLECULE OR PROBE OR PRIMER OR
      OLIGONUCLEOTIDE?)
L4      0 SEA ABB=ON  PLU=ON  L3 AND GLOBIN
L5     81147 SEA ABB=ON  PLU=ON  COMPLEX? (10A) (REDUC?)
L6     132 SEA ABB=ON  PLU=ON  L5 AND GLOBIN
L7      0 SEA ABB=ON  PLU=ON  L3 AND HOUSEKEEPING
L8      6 SEA ABB=ON  PLU=ON  L3 AND ABUNDAN?
L9     7946 SEA ABB=ON  PLU=ON  GLOBIN AND (REDUC? OR DEPLET? OR REMOV?)
L10    2542 SEA ABB=ON  PLU=ON  GLOBIN(S) (REDUC? OR DEPLET? OR REMOV?)
L11    2504 SEA ABB=ON  PLU=ON  GLOBIN(30A) (REDUC? OR DEPLET? OR REMOV?)
L12    674 SEA ABB=ON  PLU=ON  GLOBIN(30A) (REDUC? OR DEPLET? OR REMOV?) (S)
      (MRNA OR EXPRESSION OR RNA)
L13    674 SEA ABB=ON  PLU=ON  GLOBIN(30A) (REDUC? OR DEPLET? OR REMOV?) (30
      A) (MRNA OR EXPRESSION OR RNA)
L14    310 DUP REM L13 (364 DUPLICATES REMOVED)
L15     31 SEA ABB=ON  PLU=ON  L14 AND (RNASE OR DIGEST?)
L16     31 DUP REM L15 (0 DUPLICATES REMOVED)
L17     23 DUP REM L1 (11 DUPLICATES REMOVED)
L18     37 SEA ABB=ON  PLU=ON  L3 AND (MRNA OR CDNA OR RNA)
L19     25 DUP REM L18 (12 DUPLICATES REMOVED)
L20      7 SEA ABB=ON  PLU=ON  RNA(10A) STABILIZER? AND (BLOOD OR PLASMA
      OR SERUM)
L21      5 DUP REM L20 (2 DUPLICATES REMOVED)
L22      0 SEA ABB=ON  PLU=ON  L17 AND BLOOD
L23      4 SEA ABB=ON  PLU=ON  L18 AND BLOOD
L24    500 SEA ABB=ON  PLU=ON  (DEPLET? OR REMOV? OR INACTIV?) (20A) (RNASE(
      2A) H)
L25    236 DUP REM L24 (264 DUPLICATES REMOVED)
L26     22 SEA ABB=ON  PLU=ON  L25 AND (HEAT? OR COLUMN? OR EDTA)
L27     22 DUP REM L26 (0 DUPLICATES REMOVED)
      D L16 TI 1-10
      D L16 TI 11-20
      D L16 TI 21-31
      D L17 TI 1-10
      D L17 TI 11-23
      D L25 TI 1-12
      D L25 TI 13-23
      D L19 TI 1-12
      D L19 TI 13-25
      D L21 TI 1-10
      D L16 IBIB KWIC 1,3,4
      D L16 IBIB KWIC 12-14
      D L16 IBIB KWIC 23,28,30
      D L17 IBIB KWIC 7
      D L19 IBIB KWIC 3,13
      D L25 IBIB KWIC 3,4,8

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FILE HOME

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jan 6, 2006 (20060106/UP).

FILE CAPLUS

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FILE COVERS 1907 - 9 Jan 2006 VOL 144 ISS 3
FILE LAST UPDATED: 8 Jan 2006 (20060108/ED)

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FILE MEDLINE

FILE LAST UPDATED: 7 JAN 2006 (20060107/UP). FILE COVERS 1950 TO DATE.

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 will soon be available. For details on the 2005 reload, enter HELP RLOAD at an arrow prompt (=>).
See also:

<http://www.nlm.nih.gov/mesh/>
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_med_data_changes.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_2006_MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 4 January 2006 (20060104/ED)

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